

功能：求n次贝齐尔曲线 $p(t)$ 由 $0 \leq t_1 < t_2 \leq 1$ 界定的子曲线段的贝齐尔点。

输入参数：m\_aVertex-控制顶点, 为受保护成员, n-次数, 顶点数n+1由m\_aVertex.GetSize()确定; t1, t2-界定子曲线段的两个参数。

输出参数：m\_rVertex-由 $0 \leq t_1 < t_2 \leq 1$ 界定的子曲线段的贝齐尔点

```
void AbitBezierDevide(double t1, double t2)
{
    int n = m_aVertex.GetSize();
    if (m_lVertex.GetSize() > 0) m_lVertex.RemoveAll();
    if (m_rVertex.GetSize() > 0) m_rVertex.RemoveAll();
    m_lVertex.SetSize(n);
    m_rVertex.SetSize(n);
    m_lVertex[0].x = m_aVertex[0].x;
    m_lVertex[0].y = m_aVertex[0].y;
    for (int i = 0; i < n; i++)
    {
        m_rVertex[i].x = m_aVertex[i].x;
        m_rVertex[i].y = m_aVertex[i].y;
    }
    if ((n - 1) != 0)
    {
        for (int il = 1; il <= n - 1; il++)
        {
            for (int j = 0; j <= n - il - 1; j++)
            {
                m_rVertex[j].x = m_rVertex[j].x + int(t2 * double(m_rVertex[j + 1].x - m_rVertex[j].x));
                m_rVertex[j].y = m_rVertex[j].y + int(t2 * double(m_rVertex[j + 1].y - m_rVertex[j].y));
            }
            m_lVertex[il] = m_rVertex[0];
        }
        for (int i0 = 0; i0 < n; i0++)
        {
            m_rVertex[i0].x = m_lVertex[i0].x;
            m_rVertex[i0].y = m_lVertex[i0].y;
        }
        for (il = 1; il <= n - 1; il++)
        {
            for (int j = 0; j <= n - il - 1; j++)
            {
                m_rVertex[j].x = m_rVertex[j].x + int(t1 / t2 * double(m_rVertex[j + 1].x - m_rVertex[j].x));
                m_rVertex[j].y = m_rVertex[j].y + int(t1 / t2 * double(m_rVertex[j + 1].y - m_rVertex[j].y));
            }
        }
    }
}
```